Assessing the built environment in care homes for people with dementia

1575 words without references

Introduction

This article draws on our evaluation of environmental improvements to a care home for people with dementia, some results of which were recently published in this journal (Abbott et al, 2016). Here, we discuss different ways of assessing the built environment of care homes, and suggest how staff teams can approach such a task themselves, or in collaboration with other teams. Such assessments could be used to track changes over time, or to compare different homes. The methods could also be used in staff training to help sensitise or re-sensitise staff to environmental factors in the care that they provide.

We compare the three methods that we used in the evaluation:

- routinely collected data about incidents and behaviours that might reflect the physical environment;
- already existing environmental assessment tools; and
- interviews with staff, residents and visitors about the quality of the environment as a place to live, work or visit.

We consider four key questions in relation to each method:

- Can data be collected quickly and cheaply?
- Does the method intrude on the privacy of residents?
- Does it show how the environment affects residents, visitors and staff?
- Does it also illustrate the context and culture of the home?

The rationales for these questions are self-explanatory except perhaps the last. As we showed in our earlier article (Abbott et al, 2016), those we interviewed highlighted the importance of the overall context and culture of the home: the building can support but cannot determine the overall quality of care. It is therefore useful to know which methods may help to capture some of that context.

Routinely collected audit data

The routinely collected data made available to us consisted of numbers of:

- slips, trips and falls;
- incidents of violence and aggression;
- safeguarding incidents;
- resident complaints;
- staff absence, sickness and turnover.

On the face of it, all of these might reflect a favourable environment that was low-risk, convenient and calming, making it a pleasant place to live, visit and work. These data were already collected, and therefore required no extra effort. But they proved to be of very limited use to us, because it was not possible to directly attribute any of these outcomes solely or primarily to environmental factors. For example, management policy would have more impact on staff sickness and absences; while rates of slips, trips and falls may reflect case mix (physical and/or mental frailty of residents) or changing trends in use of medication. Table 1 records the advantages and disadvantages of this particular method.

Table 1. Key questions about routinely collected data

Question	***Method 1***
Can data be collected quickly and cheaply?	Yes.
Does the method intrude on the privacy of residents?	No.
Does it show how the environment affects residents, visitors and staff?	Usually not. Possibly, if reports include sufficient detail, e.g. the circumstances of a fall.
Does it also illustrate the context and culture of the home?	

Environmental assessment tools

Another approach is to use good practice guidelines to provide assessment criteria. There are a number of guidelines available, which are broadly consistent:

- Enhancing the Healing Environment dementia care tool for care homes. (King's Fund, 2013);
- Dementia Gateway: Environment (Social Care Institute for Excellence (SCIE), 2013)
- Dementia Design Checklist (Health Facilities Scotland (HFS), 2007)
- Good Practice in the Design of Homes and Living Spaces for People with Dementia and Sight Loss. University of Stirling Dementia Services Design Centre (Greasley-Adams et al, undated);
- Marshall's Framework (Marshall, 2001); and
- the Dementia Therapeutic Garden tool (www.enablingenvironments.com.au)

The tools were easy to use, and yielded useful data. Furthermore, they sensitised the assessors to aspects of the environment that they might otherwise not have considered. However, tick boxes are based on fixed criteria, which may be debatable. For example, the EHE (King's

Fund, 2013) suggests that in designing bathrooms, taps should be of traditional design, presumably to aid recognition in people with a degree of cognitive impairment. However, occupational therapists recommend the use of lever tap handles as being easier for older people to manipulate (Dziedzic et al, 2011). There is no 'right' balance between familiarity and functionality: different residents will have different needs and preferences which may change over time, but such decisions have to be permanent. Tick boxes cannot explore the rationale for decisions at odds with guidelines, though these may be thoughtful and caring. Also, checklists cannot take into account the structural limitations of individual premises, such as, in this case, the restricted size of the garden. Table 2 records the advantages and disadvantages of this method.

Table 2. Key questions about assessment tools

Question	***Method 2***
Can data be collected quickly and cheaply?	Yes.
Does it intrude on the privacy of residents?	To an extent, as it involves walking round house and garden and therefore some observation of residents.
Does it show how the environment affects residents, visitors and staff?	It provides some detail of context and culture, though without explanation or exploration.
Does it also illustrate the context and culture of the home?	Yes, though without explanation or exploration.

Semi-structured interviews

Staff, visitors and residents between them have comprehensive experience of how the environment affects all three groups, so it makes sense to draw on this knowledge. This method is time-consuming and intrusive but has the potential to yield rich and detailed data. However, such data depends on the accuracy and frankness of staff, which may be imperfect.

Data may be contradictory: for example, in our study, some staff said that the residents never look at the pictures on the walls, while others said the reverse. This may have reflected case mix changes within the home or over time, or it may have reflected the different attitudes and observational skills of individual staff. Interviews cannot in themselves explain such disparities. However, it is likely that, as outsiders, we were more able than fellow members of staff would be to encourage staff to speak frankly about negative aspects of the environment. Table 3 records the advantages and disadvantages of this method.

Table 3. Key questions about interviews

Strengths/weaknesses	***Method 3***
Can data be collected quickly and cheaply?	No. Negotiation, conduct and analysis of interviews takes time and skill.
Does the method raise issues of informed consent?	Yes.
Does it intrude on the privacy of residents?	Yes, it involves interrupting normal activities and enquiring into personal habits and practices.
Does it show how the environment affects residents, visitors and staff?	Yes.
Does it also illustrate the context and culture of the home?	

Observational methods

We did not use observational methods, but it is likely that these would give a more complete and accurate picture of how the environment is used. Tools for observation in these sorts of care setting have been developed: for example, Dementia Care Mapping (DCM) (Bradford Dementia Group, 2014), and The Quality of Interactions Schedule (QUIS) (Dean, Proudfoot and Lindesay, 1993). Building on these methods, a structured observational approach could be devised to capture resident, visitor and staff interactions with the environment. The creation, testing and use of such a tool would of course be time-consuming and involve

considerable intrusion into the lives of residents and staff. But observation can provide a more accurate and detailed account of what actually happens. Table 4 records the advantages and disadvantages of this method.

Table 4. Key questions about observation

Strengths/weaknesses	***Method 3***
Can data be collected quickly and cheaply?	No.
Does the method raise issues of informed consent?	Yes.
Does it intrude on the privacy of residents?	Yes, it involves the presence of observers during normal daily activities.
Does it show how the environment affects residents, visitors and staff?	Yes, though it may not be possible to corroborate what is said.
Does it also illustrate the context and culture of the home?	

Discussion

Our conclusions (summarised in Table 5) are as follows. Proxy indicators such as trips, slips and falls, etc., are unhelpful because such events may be the result of numerous different factors interacting. Assessment checklists are valuable in highlighting important environmental factors, but they assume definitive answers to questions about values and approaches that sometimes conflict. Checklists are valuable aids to reflection and ideas-generation, but they should not be used lightly as service specifications. Interviews are able to capture the complexity of the care environment more fully than the other methods. However, they are potentially more disruptive and more time-consuming, and may be over-dependent on uncorroborated opinions.

Table 5. Key features of the four methods

Strengths/weaknesses	***Method 1***	***Method 2***	***Method 3***	***Method 4***
Can data be collected quickly and cheaply?	Y	Y	N	N
Does the method intrude on the privacy of residents?	N	N	Y	Y
Does it show how the environment affects residents, visitors and staff?	N	Y (limited)	Y	Y
Does it also illustrate the context and culture of the home?	N	Y (limited)	Y	Y

Y = yes N = no

It is clear from Table 5 that the most informative methods are also the most time-consuming, and different teams will want to make different trade-offs. In general, we would discourage the use of method 1, recommend method 4, and suggest that methods 2 and 3 are useful approaches to adopt as long as their limitations are always borne in mind.

Having gathered assessment data, what is the next step? Data could be used in a number of ways. Our previous paper illustrated some of the links between the physical environment, the well-being of residents and staff, and the quality of care. Although that home received funding for refurbishment, which will not be the case for most homes, there were nevertheless lessons learnt that can be transferred. For example, the findings could be used to help prioritise redecoration and refurbishment plans, by demonstrating which areas of the home are problematic for staff and residents. In the care home we assessed, a staff member found that using the clinical white bathrooms, which had been 'torture', became much more pleasurable for staff and residents once the décor was more colourful and more safety aids were fitted. Findings could also be used in staff training to highlight opportunities to promote the quality of life and functioning of residents: an example is the trouble some staff took to draw attention to pictures on the wall and to encourage discussion and reminiscence. The

assessment exercise may also highlight challenges to a homely atmosphere, such as the access to the garden being through a dining room. Though structural flaws like this cannot be changed easily or cheaply, staff could be helped to think of the disruption to diners and to devise ways of minimising that disruption. Finally, assessments can help staff to identify and articulate aspects of the environment that affect themselves adversely, such as where carpets make it hard to push wheelchairs and trolleys.

As we concluded in our earlier paper, even the best physical environment needs staff who are enabled to understand how residents are affected by the space they live in, and who can act accordingly to enhance the quality of life.

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